

REMARKS

Summary

Claims 1, 3, 5, 8-9 and 15-17 are currently pending in the application. Favorable reconsideration and allowance of the pending claims are respectfully requested.

35 U.S.C. § 102

At page 2, paragraph 2 of the Office Action claims 1, 3, 5, 8-9 and 15-17 stand rejected under 35 U.S.C. § 102 as being anticipated by United States Patent Number (USPN) 6768457 (Lindenmeier). Applicant respectfully traverses the rejection, and requests reconsideration and withdrawal of the anticipation rejection.

Applicant respectfully submits that to anticipate a claim under 35 U.S.C. § 102, the cited reference must teach every element of the claim. *See* MPEP § 2131, for example. Applicant submits that the Lindenmeier reference fails to teach each and every element recited in claims 1, 3, 5, 8-9 and 15-17 and thus they define over the Lindenmeier reference. For example, with respect to claim 1, the Lindenmeier reference fails to teach, *inter alia*, the following language:

partitioning multiple antennas into a first tier and a second tier, the first tier having one antenna selected as a receiving antenna and non-selected antenna in the second tier....

By way of example, as shown in FIGS. 1 and 2, a wireless communications device 10 may have multiple antennas, such as four antennas A₀, A₁, A₂ and A₃. The four antennas A₀, A₁, A₂ and A₃ may be partitioned into a first tier group and a second tier group. The

first tier group may comprise antenna A_0 , while the second tier group may comprise antennas A_1 , A_2 and A_3 . See, e.g., Specification, Page 4: Line 17 to Page 5: Line 31. The use of multiple tiers may assist in implementing a dynamic selection and antenna priority process that enables the wireless communications device 10 to process signals having the highest quality in a more efficient manner. See, e.g., Specification, Page 5: Lines 13-23.

Applicant respectfully submits that independent claim 1 defines over the Lindenmeier reference. According to the Office Action, the above-recited claim language is disclosed by the Lindenmeier reference at column 9, lines 28-44 and column 15, lines 12-33. Applicant respectfully disagrees. The Lindenmeier reference at column 9, lines 28-44, states:

Therefore, FIG. 1a shows a basic embodiment of a reception system of the invention, whereby a bandpass 26 and a reception level indicator 36 (see FIG. 1c) are contained in receiver 3 whose output signal reflects reception level 30, and is supplied to a reception signal testing device 25. In addition, symbol cycle signal 18 is supplied to reception level testing device 25, so that a reversing signal 23 derived therefrom can be used by logic circuit 2, according to the sequence of level testing events described above for selecting a good or the most favorable reception signals 5. Antenna system 1 contains, in this embodiment, a number of individual antennas A_1 , A_2 , A_3 , which can be realized from antenna components 4a, 4b, 4c in view of the required diversity of the reception signals 5 with an advantageously high degree of freedom. To evaluate each symbol, an optimal reception signal 5 is thus available at antenna connection point 21 on the input of receiver 3.

Further, the Lindenmeier reference at column 15, lines 12-33, states:

Their antenna signals are fed to a network 62 with the individual antenna connections A_2 and A_3 , and respectively, A_4 and A_5 , for switching the signals together, for forming the sectoral directional diagrams 9 for the four azimuthal main directions 22 (see FIG. 5b). With the help of the increased directional effect of the group antennas for low elevation, the shading caused by the slanted tub walls 63 is cancelled or overcompensated. FIG. 9a shows another embodiment of

an antenna system, designed as a horizontal crossed dipole, in a metallic trough 58. It has a single antenna A1, designed in the form of a horizontal, crossed dipole, and with the antenna components 4c and 4d of an individual antenna A2 formed via a network 62 for switching the antennas together, and with the individual antennas A3 to A5 formed in a similar way. The antenna system 1, shown in FIG. 9a can be advantageously expanded in the same sense to form the antenna system 1 shown in FIG. 9b, which provides a greater number of sectoral directional diagrams 9. Depending on the site where this antenna system 1 is mounted, and the signal shading caused by the vehicle, antenna system 1 can be equipped with group antennas that are asymmetrically arranged in the center.

As indicated above, the Lindenmeier reference arguably discloses an antenna system 1 with individual antenna elements A1 to A5. The Lindenmeier reference, however, fails to disclose that the antenna elements A1 to A5 are grouped into multiple tiers. Rather, it appears that the antenna elements A1 to A5 are merely individual antenna elements placed in different portions of a device. See, e.g., Lindenmeier, FIG. 9a and accompanying description. By way of contrast, the claimed subject matter separates multiple antennas into multiple tiers to aid in evaluating the multiple antennas. The Lindenmeier reference does not appear to provide any algorithm or method to separate the multiple antennas A1 to A5 into separate groups to aid in evaluating the multiple antennas. Rather, the Lindenmeier reference utilizes preamble symbols to reevaluate all of the antennas and provides a reception level testing device 25 to select a desired antenna. This is clearly different than “partitioning multiple antennas into a first tier and a second tier, the first tier having one antenna selected as a receiving antenna and non-selected antenna in the second tier” as recited in claim 1. Consequently, the Lindenmeier reference fails to disclose all the elements or features of the claimed subject matter.

Applicant respectfully submits that independent claim 1 defines over the Lindenmeier reference for other reasons as well. For example, the Lindenmeier reference fails to teach, *inter alia*, the following language:

replacing the receiving antenna in the first tier with an antenna in the second tier that has the signal quality higher than the one antenna in the first tier.

By way of example, the specification describes a channel evaluation circuit 34 that evaluates signals received by all the antennas A_0 , A_1 , A_2 and A_3 , and replaces one of the antennas from the first tier group (A_0) with an antenna from the second tier group (A_1 , A_2 and A_3) that has a signal quality higher than the antenna from the first tier group. See, e.g., Specification, Page 6: Lines 1-9. As a result, the channel evaluation circuit 34 may evaluate and compare antennas more efficiently. According to the Office Action, the above-recited claim language is disclosed by the Lindenmeier reference at column 15, lines 12-33. Applicant respectfully disagrees. As previously discussed, the Lindenmeier reference at column 15, lines 12-33, arguably describes positioning the antenna elements A_1 to A_5 to change sectoral directional diagrams. There is no discussion of any antenna replacement algorithm or method at the given cite of the Lindenmeier reference, however, let alone the specific replacement algorithm of “replacing the receiving antenna in the first tier with an antenna in the second tier that has the signal quality higher than the one antenna in the first tier” as recited in claim 1. Consequently, the Lindenmeier reference fails to disclose all the elements or features of the claimed subject matter.

Accordingly, Applicant respectfully requests removal of the anticipation rejection with respect to claim 1. Furthermore, Applicant respectfully requests withdrawal of the

anticipation rejection with respect to claims 3 and 5, which depend from claim 1, and therefore contain additional features that further distinguish these claims from the Lindenmeier reference.

Independent claims 8 and 15 features similar to those recited in claim 1. Therefore, Applicant respectfully submits that claims 8 and 15 are not anticipated and are patentable over the Lindenmeier reference for reasons analogous to those presented with respect to claim 1. Accordingly, Applicant respectfully requests removal of the anticipation rejection with respect to claims 8 and 15. Furthermore, Applicant respectfully requests withdrawal of the anticipation rejection with respect to claims 9, 16 and 17 that depend from claims 8 or 15, and therefore contain additional features that further distinguish these claims from the Lindenmeier reference.

Conclusion

For at least the above reasons, Applicant submits that claims 1, 3, 5, 8-9 and 15-17 recite novel features not shown by the cited references. Further, Applicant submits that the above-recited novel features provide new and unexpected results not recognized by the cited references. Accordingly, Applicant submits that the claims are not anticipated nor rendered obvious in view of the cited references.

Applicant does not otherwise concede, however, the correctness of the Office Action's rejection with respect to any of the dependent claims discussed above. Accordingly, Applicant hereby reserves the right to make additional arguments as may be necessary to further distinguish the dependent claims from the cited references, taken alone or in combination, based on additional features contained in the dependent claims

Appl. No. 10/607,801
Response Dated December 31, 2008
Reply to Office Action of September 26, 2006

Docket No.: 1020P16725
Examiner: Mancuso, Huedung Cao
TC/A.U. 2821

that were not discussed above. A detailed discussion of these differences is believed to be unnecessary at this time in view of the basic differences in the independent claims pointed out above.

It is believed that claims 1, 3, 5, 8-9 and 15-17 are in allowable form. Accordingly, a timely Notice of Allowance to this effect is earnestly solicited.

The Examiner is invited to contact the undersigned at 724-933-9338 to discuss any matter concerning this application.

The Office is hereby authorized to charge any additional fees or credit any overpayments under 37 C.F.R. § 1.16 or § 1.17 to deposit account 50-4238.

Respectfully submitted,

KACVINSKY LLC

/John F. Kacvinsky/

John F. Kacvinsky, Reg. No. 40,040

Dated: December 31, 2008

KACVINSKY LLC
C/O Intellevate
P.O. Box 52050
Minneapolis, MN 55402
(724) 933-5529